

1 **What is claimed is:**

2 1. A driving method for rapidly charging pixels of
3 a liquid crystal display, wherein the liquid crystal
4 display comprises a plurality of data lines, a plurality
5 of scan lines, at least one common electrode, and a
6 plurality of pixel units corresponding to sets of the
7 interlacing data lines and scan lines, and each of the
8 pixel units comprises a TFT having a gate coupled to the
9 corresponding scan line, a first electrode coupled to the
10 corresponding data line, and a second electrode, a
11 storage capacitor having a terminal coupled to the second
12 electrode, and a liquid crystal cell coupled between the
13 second electrode and the common electrode, the method
14 comprising the steps of:

15 providing a plurality of storage electrodes, each
16 corresponding to one of the scan lines and
17 coupled to the other terminal of the storage
18 capacitor;

19 sequentially generating a plurality of pre-charging
20 signals, respectively output to the storage
21 electrodes, wherein the pre-charging signals
22 vary periodically; and

23 sequentially generating a plurality of scan signals,
24 respectively output to the scan lines;

25 wherein a variation in a voltage level of each of
26 the pre-charging signals occurs before one of
27 the scan signals is applied to the
28 corresponding scan line.

1 2. The driving method as claimed in claim 1,
2 wherein the variation in the voltage level of the pre-
3 charging signal applied to the storage electrode
4 corresponding to a row is triggered by the scan signal
5 applied to the scan line corresponding to the previous
6 row.

1 3. The driving method as claimed in claim 1,
2 wherein polarities of any two adjacent pre-charging units
3 are opposite.

1 4. A liquid crystal display, comprising:
2 a plurality of data lines;
3 a plurality of scan lines;
4 a plurality of storage electrodes disposed
5 correspondingly on the scan lines;
6 at least one common electrode;
7 a plurality of pixel units, each corresponding to
8 one set of interlacing data line and scan line;
9 each of the pixel units comprising:
10 a TFT having a gate coupled to the
11 corresponding scan line, a first electrode
12 coupled to the corresponding data line,
13 and a second electrode;
14 a storage capacitor coupled between the
15 corresponding storage electrode and the
16 second electrode; and
17 a liquid crystal cell coupled between the
18 second electrode and the common electrode;

19 a scan line driver sequentially generating a
20 plurality of scan signals respectively output
21 to the scan lines; and
22 a pre-charging driver sequentially generating a
23 plurality of pre-charging signals output to the
24 storage electrodes, driving the pre-charging
25 signals to vary periodically, and controlling
26 variations in voltage levels of the pre-
27 charging signals to occur before the scan
28 signals are applied to the scan lines.

1 5. The liquid crystal display as claimed in claim
2 4, wherein the pre-charging driver is coupled to the scan
3 lines, and when the scan signals are respectively applied
4 to the scan lines, the scan signals respectively trigger
5 the voltage levels of the pre-charging signals to vary.

1 6. The liquid crystal display as claimed in claim
2 5, wherein the pre-charging driver comprises a plurality
3 of pre-charging units, each coupled between a
4 corresponding scan line and storage electrode.

1 7. The liquid crystal display as claimed in claim
2 6, wherein one of any two adjacent pre-charging units
3 comprises a D-type flip-flop, and the other of the two
4 adjacent pre-charging units comprises a D-type flip-flop
5 and a inverter.

1 8. The liquid crystal display as claimed in claim
2 6, wherein each of the pre-charging units comprises a D-
3 type flip-flop.

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1 9. The liquid crystal display as claimed in claim
2 4, wherein polarities of any two adjacent pre-charging
3 units are opposite.